

4/23/2008 10/525,499

CAS/STN

FILE 'CAPLUS' ENTERED AT 08:55:02 ON 23 APR 2008
E MOLECULAR BEAM EPITAXY/CT
E E3+ALL/CT

L3 FILE 'HCAPLUS' ENTERED AT 08:57:00 ON 23 APR 2008
46429 SEA ABB=ON PLU=ON MBE OR M B E OR (MOL OR MOLECUL#### OR
ATOM OR ATOMIC) (3A) BEAM (3A)? EPITAX?

FILE 'CAPLUS' ENTERED AT 08:57:10 ON 23 APR 2008
E QUANTUM WELLS/CT
E E3+ALL/CT
E QUANTUM WELL HETEROJUNCTIONS/CT
E E3+ALL/CT

FILE 'STNGUIDE' ENTERED AT 08:58:23 ON 23 APR 2008

L4 FILE 'HCAPLUS' ENTERED AT 08:59:18 ON 23 APR 2008
88873 SEA ABB=ON PLU=ON QW OR Q W OR QUANTUM (2A) (?DEVICE OR WELL
OR ?JUNCTION? OR ?DOT)

FILE 'STNGUIDE' ENTERED AT 08:59:19 ON 23 APR 2008

L5 FILE 'REGISTRY' ENTERED AT 08:59:51 ON 23 APR 2008
L6 10832 SEA ABB=ON PLU=ON AMMONIA
1 SEA ABB=ON PLU=ON AMMONIA/CN
D IDE

FILE 'HCAPLUS' ENTERED AT 09:00:52 ON 23 APR 2008
L7 8597 SEA ABB=ON PLU=ON L3 AND L4
L8 79 SEA ABB=ON PLU=ON L7 AND (L5 OR NH3 OR AMMONIA)
L9 508 SEA ABB=ON PLU=ON L7 AND (WAFER OR SI OR SILICON OR SUBSTRATE
) (3A) (TEMP OR TEMPERATURE)

FILE 'STNGUIDE' ENTERED AT 09:02:04 ON 23 APR 2008

L10 FILE 'HCAPLUS' ENTERED AT 09:03:21 ON 23 APR 2008
317577 SEA ABB=ON PLU=ON (STEP##### OR RAIS##### OR CHANG##### OR
HIGHER OR HIGHEST OR LOWER OR LOWEST OR SECOND OR ANOTHER OR
2ND OR 2 OR TWO OR 3 OR THIRD OR THREE OR 3RD) (2W) (TEMP OR
TEMPERATURE)

L11 210100 SEA ABB=ON PLU=ON (INCREAS##### OR GREATER##### OR RANG#####) (2
W) (TEMP OR TEMPERATURE)

FILE 'STNGUIDE' ENTERED AT 09:03:58 ON 23 APR 2008

L12 FILE 'HCAPLUS' ENTERED AT 09:05:54 ON 23 APR 2008
30724 SEA ABB=ON PLU=ON (VARY##### OR VARIABLE OR VARIES OR MULTI
OR MULTIPLE) (2W) (TEMP OR TEMPERATURE)

FILE 'STNGUIDE' ENTERED AT 09:05:55 ON 23 APR 2008

L13 FILE 'HCAPLUS' ENTERED AT 09:06:46 ON 23 APR 2008
L14 113 SEA ABB=ON PLU=ON L9 AND (L10 OR L11 OR L12)
2 SEA ABB=ON PLU=ON L8 AND L13
D BIB AB IT HITSTR TOT

FILE 'STNGUIDE' ENTERED AT 09:07:10 ON 23 APR 2008

L15 FILE 'HCAPLUS' ENTERED AT 09:08:31 ON 23 APR 2008
SEL PLU=ON L14 1- RE : 26 TERMS
L16 350 SEA ABB=ON PLU=ON L15

1 of 4

4/23/2008 10/525,499

L17 3 SEA ABB=ON PLU=ON L16 AND (VARY##### OR VARIABLE OR VARIES
OR MULTI OR MULTIPLE) (2W) (TEMP OR TEMPERATURE).

FILE 'STNGUIDE' ENTERED AT 09:09:04 ON 23 APR 2008

FILE 'STNGUIDE' ENTERED AT 09:09:50 ON 23 APR 2008

FILE 'HCAPLUS' ENTERED AT 09:10:02 ON 23 APR 2008

L18 5 SEA ABB=ON PLU=ON L16 AND (INCREAS##### OR GREATER##### OR
RANG####) (2W) (TEMP OR TEMPERATURE)

FILE 'STNGUIDE' ENTERED AT 09:10:03 ON 23 APR 2008

FILE 'HCAPLUS' ENTERED AT 09:10:50 ON 23 APR 2008

L19 10 SEA ABB=ON PLU=ON L16 AND (STEP##### OR RAIS##### OR CHANG####
OR HIGHER OR HIGHEST OR LOWER OR LOWEST OR SECOND OR ANOTHER
OR 2ND OR 2 OR TWO OR 3 OR THIRD OR THREE OR 3RD) (2W) (TEMP OR
TEMPERATURE)

FILE 'STNGUIDE' ENTERED AT 09:10:52 ON 23 APR 2008

FILE 'HCAPLUS' ENTERED AT 09:11:20 ON 23 APR 2008

L20 12 SEA ABB=ON PLU=ON L16 AND (WAFER OR SI OR SILICON OR
SUBSTRATE) (3A) (TEMP OR TEMPERATURE)

FILE 'STNGUIDE' ENTERED AT 09:11:20 ON 23 APR 2008

FILE 'HCAPLUS' ENTERED AT 09:13:54 ON 23 APR 2008

L21 506 SEA ABB=ON PLU=ON L7 AND (L10 OR L11 OR L12)

L22 601 SEA ABB=ON PLU=ON L8 OR L9 OR L13 OR L17 OR L18 OR L19 OR
L20

L23 989 SEA ABB=ON PLU=ON L21 OR L22

L24 24 SEA ABB=ON PLU=ON (L17 OR L18 OR L19 OR L20)

L25 24 SEA ABB=ON PLU=ON L23 AND L24

L26 22 SEA ABB=ON PLU=ON L25 NOT L14

L27 11 SEA ABB=ON PLU=ON L26 AND 1990-2002/PY

L28 0 SEA ABB=ON PLU=ON L26 AND 1990-2002/PRY

L29 0 SEA ABB=ON PLU=ON L26 AND 1980-1989/PRY
D L27 BIB AB IT RE HITSTR TOT

FILE 'STNGUIDE' ENTERED AT 09:15:18 ON 23 APR 2008

FILE 'HCAPLUS' ENTERED AT 09:19:57 ON 23 APR 2008

L30 965 SEA ABB=ON PLU=ON L23 NOT (L24 OR L14)
SET PLU OFF

L31 351 SEA ABB=ON L30 AND TEMPERATURES/TI,AB

L32 393 SEA ABB=ON L30 AND (WAFER OR SI OR SILICON OR SUBSTRATE) (3A) (T
EMP OR TEMPERATURE)

FILE 'STNGUIDE' ENTERED AT 09:20:24 ON 23 APR 2008

FILE 'HCAPLUS' ENTERED AT 09:20:48 ON 23 APR 2008

L33 124 SEA ABB=ON L30 AND (WAFER OR SI OR SILICON OR SUBSTRATE) (3A) (T
EMPS OR TEMPERATURES)

FILE 'STNGUIDE' ENTERED AT 09:20:48 ON 23 APR 2008

FILE 'HCAPLUS' ENTERED AT 09:21:13 ON 23 APR 2008

L34 45 SEA ABB=ON L31 AND L32 AND L33

FILE 'STNGUIDE' ENTERED AT 09:21:13 ON 23 APR 2008

2 of 4

4/23/2008 10/525,499

FILE 'HCAPLUS' ENTERED AT 09:21:37 ON 23 APR 2008
L35 26 SEA ABB=ON L34 AND 1990-2002/PY,PRY
L36 26 SEA ABB=ON L35 AND (QUANTUM OR QD OR DOT OR WELL OR QW)
L37 0 SEA ABB=ON L35 AND (L5 OR AMMONIA OR NH3)
L38 5 SEA ABB=ON (L31 OR L32 OR L33) AND (L5 OR AMMONIA OR NH3)
L39 5 SEA ABB=ON L38 AND (QUANTUM OR QD OR DOT OR WELL OR QW)
L40 31 SEA ABB=ON (L36 OR L37 OR L38 OR L39) NOT (L24 OR L14)
L41 29 SEA ABB=ON L40 AND 1990-2002/PY,PRY
L42 0 SEA ABB=ON L40 AND 1970-1989/PY,PRY
D L41 BIB AB IT RE HITSTR TOT

FILE 'STNGUIDE' ENTERED AT 09:24:14 ON 23 APR 2008

FILE 'HCAPLUS' ENTERED AT 09:41:26 ON 23 APR 2008
L43 23165 SEA ABB=ON VAPOR DEPOSITION PROCESS(L)METALORG? OR ?MOCVD? OR
METALORG?(1A) (CVD OR (CHEM OR CHEMICAL) (W) (VAPOR OR VAPOUR))
OR MO CVD
L44 1506 SEA ABB=ON L3 AND L43
L45 251 SEA ABB=ON L44 AND L4
L46 61 SEA ABB=ON L45 AND COMPAR#####
L47 0 SEA ABB=ON L45 AND VERSUS
L48 8 SEA ABB=ON L45 AND ADVANTAG#####
L49 3 SEA ABB=ON L45 AND BETTER
L50 0 SEA ABB=ON L45 AND HIGHER QUALITY
L51 28 SEA ABB=ON L45 AND QUALITY
L52 0 SEA ABB=ON L45 AND PRO
L53 0 SEA ABB=ON L45 AND CON
L54 0 SEA ABB=ON L45 AND DISADVANTAG#####
L55 10 SEA ABB=ON L45 AND PROBLEM#####
L56 9 SEA ABB=ON L45 AND BEST
L57 3 SEA ABB=ON L45 AND BETTER
L58 93 SEA ABB=ON (L46 OR L47 OR L48 OR L49 OR L50 OR L51 OR L52 OR
L53 OR L54 OR L55 OR L56 OR L57)
SET PLU ON PERM
L59 34 SEA ABB=ON PLU=ON L58 AND (TEMP OR TEMPERATURE)
L60 20 SEA ABB=ON PLU=ON L59 AND 1990-2002/PY
L61 0 SEA ABB=ON PLU=ON L59 AND 1990-2002/PRY
L62 2 SEA ABB=ON PLU=ON L59 AND 1970-1989/PRY,PY
L63 7 SEA ABB=ON PLU=ON L60 AND GAN
L64 2 SEA ABB=ON PLU=ON L60 AND ?ALGAN?
L65 6 SEA ABB=ON PLU=ON L60 AND ?INGAN?
L66 9 SEA ABB=ON PLU=ON L60 AND NITRIDE
L67 0 SEA ABB=ON PLU=ON L60 AND (L5 OR NH3 OR AMMONIA)
L68 9 SEA ABB=ON PLU=ON (L63 OR L64 OR L65 OR L66 OR L67)
D ALL TOT

FILE 'STNGUIDE' ENTERED AT 09:46:09 ON 23 APR 2008

FILE 'HCAPLUS' ENTERED AT 09:54:23 ON 23 APR 2008
E DAMILANO B, 2000/RE

FILE 'STNGUIDE' ENTERED AT 09:54:23 ON 23 APR 2008

FILE 'HCAPLUS' ENTERED AT 09:55:44 ON 23 APR 2008
E DAMILANO B, 2000/RE
L69 8 SEA ABB=ON PLU=ON ("DAMILANO B, 2000, V180, P363, PHYS STAT
SOL A"/RE OR "DAMILANO B, 2000, V180, P363, PHYS STAT SOLIDI
A"/RE OR "DAMILANO B, 2000, V180, P363, PHYS STATUS SOLIDI
A"/RE OR "DAMILANO B, 2000, V180, P363, PHYS STATUS SOLIDI A
APPL RES"/RE OR "DAMILANO B, 2000, V180, P363, PHYSICA STATUS
SOLIDI A"/RE)
L70 2 SEA ABB=ON PLU=ON L69 AND (TEMP OR TEMPERATURES)

4/23/2008 10/525,499

L71 1 SEA ABB=ON PLU=ON L69 AND (NH3 OR AMMONIA OR L5)
L72 2 SEA ABB=ON PLU=ON (L70 OR L71)
D ALL HITSTR TOT

4 of 4

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	545	u11-c09d	DERWENT	OR	ON	2008/04/23 12:37
L2	1075	u11-c01a\$ and (mbe or (beam near2 epitax\$6))	DERWENT	OR	ON	2008/04/23 12:38
L3	1335	u11-c01a\$ and (mol or molec\$6) near2 beam	DERWENT	OR	ON	2008/04/23 12:38
L4	1910	L1 or L2 or L3	DERWENT	OR	ON	2008/04/23 12:38
L5	546	L4 and (temp or temperatures or 800c or 800deg\$5 or ("800" adj2 (deg or degree or c)))	DERWENT	OR	ON	2008/04/23 12:39
L6	11	L4 and (550c or 550deg\$5 or ("500" adj2 (deg or degree or c)))	DERWENT	OR	ON	2008/04/23 12:40
L7	1	L4 and (880c or 880deg\$5 or ("880" adj2 (deg or degree or c)))	DERWENT	OR	ON	2008/04/23 12:40
L8	1	L4 and (720c or 720deg\$5 or ("720" adj2 (deg or degree or c)))	DERWENT	OR	ON	2008/04/23 12:41
L9	0	L4 and (725c or 725deg\$5 or ("725" adj2 (deg or degree or c)))	DERWENT	OR	ON	2008/04/23 12:41
L10	4	L4 and (750c or 750deg\$5 or ("750" adj2 (deg or degree or c)))	DERWENT	OR	ON	2008/04/23 12:41
L11	13	L4 and (500c or 500deg\$5 or ("500" adj2 (deg or degree or c)))	DERWENT	OR	ON	2008/04/23 12:41
L12	0	L4 and (525c or 525deg\$5 or ("525" adj2 (deg or degree or c)))	DERWENT	OR	ON	2008/04/23 12:42
L13	6	L4 and (450c or 450deg\$5 or ("450" adj2 (deg or degree or c)))	DERWENT	OR	ON	2008/04/23 12:42
L14	0	L4 and (475c or 475deg\$5 or ("475" adj2 (deg or degree or c)))	DERWENT	OR	ON	2008/04/23 12:42
L15	547	L4 and (tems or temperature)	DERWENT	OR	ON	2008/04/23 12:43
L16	557	L5 or L6 or L7 or L8 or L9 or L10 or L11 or L12 or L13 or L14 or L15	DERWENT	OR	ON	2008/04/23 12:43
L17	61	L16 and (gan or nitride or ingan or inalgan or alingan)	DERWENT	OR	ON	2008/04/23 12:45
L18	6	L16 and L04-C12b	DERWENT	OR	ON	2008/04/23 12:46
L19	14	L16 and ga.m/c. near5 (in.m/c.)	DERWENT	OR	ON	2008/04/23 12:47
L20	73	(L17 or L18 or L19)	DERWENT	OR	ON	2008/04/23 12:47
L21	6	L20 and (quantum or mqw\$1 or qd or qds or qw or qws)	DERWENT	OR	ON	2008/04/23 12:52
L22	0	L20 and multiquantum	DERWENT	OR	ON	2008/04/23 12:49
L23	1	(mbe or L4) and (nh3 or ammonia) and third adj substrate adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:54

EAST Search History

L24	0	(mbe or L4) and (nh3 or ammonia) and three adj substrate adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:54
L25	0	(mbe or L4) and (nh3 or ammonia) and "3" adj substrate adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:54
L26	0	(mbe or L4) and (nh3 or ammonia) and 3rd adj substrate adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:54
L27	0	(mbe or L4) and (nh3 or ammonia) and "2" adj substrate adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:55
L28	0	(mbe or L4) and (nh3 or ammonia) and two adj substrate adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:55
L29	1	(mbe or L4) and (nh3 or ammonia) and second adj substrate adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:55
L30	0	(mbe or L4) and (nh3 or ammonia) and 2nd adj substrate adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:55
L31	1	(mbe or L4) and (nh3 or ammonia) and different adj substrate adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:55
L32	0	(mbe or L4) and (nh3 or ammonia) and another adj substrate adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:55
L33	0	(mbe or L4) and (nh3 or ammonia) and higher adj substrate adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:55
L34	0	(mbe or L4) and (nh3 or ammonia) and lower adj substrate adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:55
L35	0	(mbe or L4) and (nh3 or ammonia) and lower adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:56
L36	2	(mbe or L4) and (nh3 or ammonia) and higher adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:56
L37	0	(mbe or L4) and (nh3 or ammonia) and another adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:56
L38	2	(mbe or L4) and (nh3 or ammonia) and different adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:56
L39	0	(mbe or L4) and (nh3 or ammonia) and two adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:56

EAST Search History

L40	3	(mbe or L4) and (nh3 or ammonia) and second adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:56
L41	0	(mbe or L4) and (nh3 or ammonia) and "2" adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:56
L42	0	(mbe or L4) and (nh3 or ammonia) and 2nd adj (temp or temperature)	DERWENT	OR	ON	2008/04/23 12:56
L43	2	(mbe or L4) and (nh3 or ammonia) and (temps or temperatures)	DERWENT	OR	OFF	2008/04/23 12:57
L44	5	L23 or L29 or L31 or L36 or L38 or L40 or L43	DERWENT	OR	OFF	2008/04/23 12:58
L45	1	L21 and L44	DERWENT	OR	OFF	2008/04/23 12:58
L46	2	L44 and (mqw or qw or well or dot or qd or island)	DERWENT	OR	ON	2008/04/23 12:58